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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,596	08/09/2001	Zhong-Hua Wang	YOR9-2001-0451US1 (8728 -	5429

7590

05/20/2004

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EXAMINER

EHICHIOYA, FRED I

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,596	WANG ET AL.	
	Examiner	Art Unit	
	Fred I. Ehichioya	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicants' arguments, with respect to claims 1 – 33, filed April 16, 2004 have been fully considered but they are not persuasive for the following reasons.

2. Applicants argue:

(a) Buist, alone or in combination with Barr, does not disclose or suggest a method for automatically updating stock and mutual fund grammars in a speech recognition system including, inter alia, automatically updating, on a pre-specified basis, a database having a plurality of entries, each entry respectively comprising at least one name of the publicly traded stock or publicly traded fund, and baseforms of the at least one name, and automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names, as recited in claim 1 (Page 1, Paragraph 3).

(b) Buist simply does not disclose or even suggest a method or apparatus that relates to a speech recognition system (Page 2, Paragraph 2).

(c) Buist is not concerned with any type of speech recognition system, particularly a speech recognition system in which baseforms of at least one name of a publicly traded stock or fund are maintained in a database (Page 3, Paragraph 1).

(d) In Buist, order books relate to a single selected stock or fund, and do not provide information regarding other stocks or funds that have been newly listed or unlisted.

Regarding argument (a), Examiner respectfully disagrees with the applicants. In light of the specification page 14, lines 11 - 25, applicants declare "grammar file" includes a plurality of entries, with each entry corresponding to a stock or mutual fund. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, Buist discloses this as "order book" that includes stock symbol, size, price among other entries that are updated in real-time as shown in column 9, line 42 through column 10, line 25. Applicants also argue that neither Buist nor Barr update this automatically. Examiner wishes to reiterate that this teaching of Buist and Barr is done by computer system, whereas, the information/entries on the order book is updated in real-time. However, Examiner wants to categorically state that an automatic means to replace a manual activity is not sufficient to distinguish over the prior art as shown in the case of *In re Venner*.

In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) (Appellant argued that claims to a permanent mold casting apparatus for molding trunk pistons were allowable over the prior art because the claimed invention combined "old permanent-mold structures together with a timer and solenoid which automatically actuates the known pressure valve system to release the inner core after a predetermined time has elapsed."

The court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.)

Regarding arguments (b) and (c), Examiner wishes to point out that this rejection is 35 USC 103 rejections and that the Applicant is attacking each reference individually. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Examiner respectfully disagrees with the applicants since Barr discloses speech recognition that is used in stock portfolio selection as shown in column 2, lines 41 – 67. The motivation in combining Barr with Buist is that this combination makes the process easy and optimizes the investment portfolio.

Regarding argument (d), Examiner respectfully disagrees with the applicants. Buist's order book not only show how a particular stock/fund is trading, it also display most active stocks (column 11, lines 62 – 67) and as shown in fig. 6 and column 12, line 62 through column 13, line 14, it can also display new stocks and related information.

3. In view of the above, the examiner contends that all limitations as recited in the claims have been addressed in this Office Action. For the above reasons, Examiner believed that rejection of the last Office action (paper number 4) was proper.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,408,282 issued to Walter D. Buist (hereinafter "Buist") in view of USPN 5,761,442 issued to Dean S. Barr et al (hereinafter "Barr").

Regarding claims 1 and 22, Buist teaches a method for automatically updating stock and mutual fund grammars in a speech recognition (Barr column2, lines 41 – 67) system, comprising the steps of:

automatically updating, on a pre-specified basis, a database having a plurality of entries, each entry respectively corresponding to a publicly traded stock or a publicly traded fund, and respectively comprising at least one name of the publicly traded stock or publicly traded fund, a weight for the at least one name, and baseforms of the at least one name (see Fig.60 and column 6, lines 25 – 61); and

automatically updating a grammar file for names in the database, the grammar file including the names and weights for the names (see column 9, lines 42 – 55 and column 10, lines 7 - 25).

Buist does not explicitly teach a weight for the at least one name.

Barr teaches a weight for the at least one name (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Barr with the teaching of Buist wherein each stock is allocated a weight based on its estimated performance potential within the prescribed future time period and other parameters related to the investment risk. The motivation is that these weights form the basis of both long and short portfolios.

Regarding claims 2, 14, and 23, Buist teaches the steps of:

automatically identifying, from web sites, stocks and funds that are no longer listed on a market (see column 10, lines 25 – 50); and

automatically removing from the database any of the plurality of entries corresponding to the identified stocks and funds (see column 10, lines 53 – 54).

Regarding claims 3 and 24, Buist teaches the steps of:
automatically identifying, from web sites, newly listed stocks and newly listed funds, if any (see column 10, lines 26 – 34); and
automatically creating an entry in the database for each of the newly listed stocks and the newly listed funds (see column 11, lines 1 – 14).

Regarding claims 4 and 25, Buist teaches the steps of:
generating the baseforms of the names of the newly listed stocks and the newly listed funds (see column 11, lines 54 – 67).

Buist does not explicitly teach determining the weights for the names of the newly listed stocks and the newly listed funds.

Barr teaches determining the weights for the names of the newly listed stocks and the newly listed funds (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Barr with the teaching of Buist wherein each stock is allocated a weight based on its estimated performance potential within the prescribed future time period and other parameters related to the investment risk. The motivation is that these weights form the basis of both long and short portfolios.

Regarding claims 5, 16 and 26, Buist teaches the steps of:
identifying the transaction volumes of any stocks and funds for which an entry exists in the database (see Fig. 6 step 677 and column 13, lines 14 - 40);

quantizing the transaction volumes into a plurality of bands (see column 13, lines 27 – 40).

Buist does not explicitly teach assigning a corresponding weight to each of the plurality of bands.

Barr teaches assigning a corresponding weight to each of the plurality of bands (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Barr with the teaching of Buist wherein each stock is allocated a weight based on its estimated performance potential within the prescribed future time period and other parameters related to the investment risk. The motivation is that these weights form the basis of both long and short portfolios.

Regarding claims 6 and 27, Barr teaches wherein a given corresponding weight assigned to a given band corresponds to each of the names of any of the stocks and funds in the given band (see column 2, lines 2 – 11).

Regarding claims 7, 17 and 28, Buist teaches the steps of:

automatically combining short words in the database to form combined words, a short word being a stock name or a fund name that has less than a predefined number of phonemes (see Figs. 5, 51 and column 34, lines 40 – 65);

automatically generating the baseforms for the combined words; and updating the grammar file to include the combined words (see column 10, line 63 thru column 11, line 14).

Regarding claims, 18 and 29, Barr teaches wherein said step of updating the database comprises the step of automatically adapting the weights for the names in the database, based upon a transaction volume over a predetermined period of time (see column 7, line 66 thru column 8, line 18).

Regarding claims 9 and 30, Buist teaches wherein said step of updating the database is performed on a pre-specified basis (see column 17, lines 44 – 47).

Regarding claims 10 and 31, Buist teaches wherein the pre-specified basis is daily (see column 36, lines 20 – 27).

Regarding claims 11, 19 and 32, Buist teaches wherein each of the plurality of entries further comprises one of corresponding resolved stock names or corresponding resolved fund names, if any (see column 14, line 60 thru column 15, line 26).

Regarding claims 12, 20 and 33, Buist teaches wherein each of the plurality of entries further comprises corresponding stock nicknames or corresponding fund nicknames, if any (see Fig. 8).

Regarding claim 13, Buist teaches a method for automatically updating stock and mutual fund grammars in a speech recognition (Barr column 2, lines 41 – 67) system, comprising the steps of:

constructing a database having a plurality of entries, each entry respectively corresponding to a publicly traded stock or a publicly traded fund, and respectively comprising at least one name of the publicly traded stock or publicly traded fund, a weight for the at least one name, and baseforms of the at least one name (see column 10, line 63 thru column 11, line 14);

generating a grammar file for names in the database, the grammar file including the names and weights for the names (see Fig.60 and column 6, lines 25 – 61);

automatically updating the database on a pre-specified basis, including adding new entries for newly listed stocks and newly listed funds and removing any of the plurality of entries corresponding to newly unlisted stocks and newly unlisted funds (see column 10, lines 53 – 54);

and automatically updating the grammar file with respect to the newly listed stock names and the newly listed fund names (see column 10, line 63 thru column 11, line 14).

Buist does not explicitly teach a weight for the at least one name.

Barr teaches a weight for the at least one name (see column 4, lines 51 – 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Barr with the teaching of Buist wherein each

stock is allocated a weight based on its estimated performance potential within the prescribed future time period and other parameters related to the investment risk. The motivation is that these weights form the basis of both long and short portfolios.

Regarding claim 15, Buist teaches wherein said step of adding the new entries for the newly listed stocks and the newly listed funds comprises the step of automatically identifying, from web sites, the newly listed stocks and newly listed funds, if any (see column 10, line 63 thru column 11, line 28).

Regarding claim 21, Buist teaches wherein said step of updating the database comprises the step of automatically generating baseforms of the newly listed stock names and the newly listed fund names (see column 10, line 63 thru column 11, line 14).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

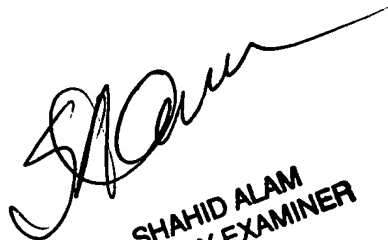
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya
Examiner
Art Unit 2172
May 14, 2004



SHAHID ALAM
PRIMARY EXAMINER